

ALOE CRYPTOPODA BAK.

By H. BASIL CHRISTIAN.

Aloe cryptopoda Bak., in Journ. Bot. (1884) 52; in Th. Dyer. Fl. Trop. Afr. VII (1898) 467; Berger. Das Pflanzenreich (1908) 233:—

Aloe Pienaarii Pole-Evans. Trans. R. Soc. S. Afr. Vol. V, i, p. 27. June 1915.

A. cryptopoda Bak. was first collected by Dr. Kirk (No. 96) on the banks of the Zambesi River, opposite Sena, P.E.A. in July 1859, the dried material being received at Kew in 1883. It was again collected by Menyharth (No. 1238) at Nhawidue, P.E.A.

A. Pienaarii Pole-Evans was first collected by P. J. Pienaar at Smit's Drift in the neighbourhood of Pietersburg, Transvaal, in Jan. 1914, and described from plants which flowered in the gardens of the Div. of Botany, Pretoria.

I am of the opinion that these two species are co-specific for the following reasons:—

In July 1937 the late B. D. Burt, Botanist to the Div. Tsetse Research, Shinyanga, Tanganyika Territory, sent me his complete collection, living and dried, of *Aloe* material for identification, duplicates of the dried material having been sent to Kew and the British Museum.

Burt (No. 5860) collected in the Njakwa Gorge, and seen on Njakwa Mt. on the Gt. North Road, Nyasaland, I identified as *A. cryptopoda* Bak. Writing from Kew at the end of 1937 Mr. Burt said "I have compared my material with that of *A. cryptopoda* collected by Kirk and agree with you that my No. 5860 is this species." He added: "There is another specimen of *A. cryptopoda* collected by R. W. Jack from Salisbury, with only the Eyles herbarium number 7005, July 1929." On enquiring, Mr. Jack told me that he had collected his plant on the Twentydales Estate, 12 miles South of Salisbury, S.R. a well-known locality for this species.

From material collected by Mr. Jack some years ago in the Lomagundi District, S.R., Dr. Pole-Evans identified this species as *A. Pienaarii*.

It is widely, though not plentifully, distributed in scattered colonies in Southern Rhodesia:—Wankie Dist., Levy; Lomagundi Dist., Jack; Umvukwes Dist., Tremlett; Salisbury Dist., Everett; Ruwangwa R.

57 miles North of Inyanga, Stap ; Mtaradza R. Eastern Border, Vereker ; mouth of the Sabi River Gorge, Vereker ; Mazoe Dist., Boden.

In N. Rhodesia :—Victoria Falls, Dales Kop, Reynard ; banks of Zambesi River, Livingstone, Porter ; Mkushi Dist., Munday ; N. of Choma, Munday ; Fort Jameson, Munday.

In Nyasaland :—Njakwa Gorge, Burt 5860 ; Mitanga River between Fort Hill and Njakwa, J. C. Smuts No. 2027, in Nat. Herb. Pretoria ; Fort Johnston Dist., Rangeley ; Blantyre—Tete Road, 51 miles South of Blantyre, Holland and Christian No. 946.

Portuguese East Africa :—Banks of Zambesi River opposite Sena, Kirk (No. 96) ; Nhawidue, Zambesi River Valley, Menyharth (No. 1238) ; Tete—Blantyre Road near the Nyasaland Border, Weaver.

In their distinctive habit, shape of leaves and marginal dentation, plants from these various localities compare very well and a comparison of photographs of the type material of *A. cryptopoda* at Kew, kindly sent me by the Director, with Burt No. 5860, Eyles No. 7005, Smuts No. 2027 shows that they agree very closely with the type material of *A. Pienaarii* in the Nat. Herb. Pretoria. Apart from minor differences in the branching habits of the inflorescence, length and density of racemes, material from these various localities agree with the Transvaal form. North of the Limpopo River, the inflorescence is usually bi-furcate or with 2—3 rather divaricate branches. The racemes vary in length on individual plants, are from dense to sub-lax and in shape from conico-cylindric to long acuminate according to their length and density. The characteristic shape of the almost amplexicaul bracts and the shape and various characters of the perianths prove that these are the same species. The colour of the flowers is bright red shading to yellowish at the tips with the racemes uni-coloured.

Mr. G. W. Reynolds in Journ. S.A. Bot. Vol. III (1937), p. 146, says : “ In typical *A. Pienaarii* the inflorescence is compactly 5—8 branched ” and this, combined with the fact that the racemes of *A. cryptopoda* are generally longer and laxer, constitute the only differences between the two geographical forms. The photographs of the type material at Kew and Berger's figure in “ Das Pflanzenreich ” show a raceme in its advanced stage with the apical flowers developed.

Berger placed *A. cryptopoda* in his section *Latebracteatae* but, at that time, only one of the three species in this section had been figured, viz., *A. brachystachys* Bak. in Bot. Mag. (1908) t. 7399, where it is shown as a caulescent plant. Nothing was known as to the habit of either *A. cryptopoda* Bak., or *A. Lastii* Bak. and Berger from the one species whose habit was known, diagnosed this section as caulescent.

Most probably for this reason and because the figures of spp. in the

section *Tropicales* resemble *A. Pienaarii* Dr. Pole-Evans considered that his species, an acaulescent plant, could not fall into the section *Latebracteatae* and referred it to Berger's section *Tropicales*, but, in doing so, drew attention to the fact that the bracts were much larger than those in this latter section and the perianths not stipitate. The bracts, are in fact, one of the most conspicuous features of the inflorescence and are responsible for the name *cryptopoda* = a hidden foot.

With our more complete knowledge of this species, a slight amplification of Berger's diagnosis of the Section *Latebracteatae*, to which it obviously belongs, is proposed, and it will now read as follows:—

“Acaules usque caulescentes, folia ensiformia. Bracteae latae, obtusae, pedicellis breviores, sub-orbiculares vel e basi amplexicauli brevissime acuminatae. Perigonium haud vel \pm stipitatum cylindraceum et supra ovarium vix constrictum.”

The only additions are the words “Acaules usque” . . . and . . . “haud vel” . . .

From the above it will be seen that *A. cryptopoda* Bak. and *A. Pienaarii* Pole-Evans are co-specific and the name *A. Pienaarii* will have to go into synonymy.